

**Remarks**

In the non-final Office Action dated January 20, 2010, it is noted that claims 6-8 and 12-14 are allowed. The drawings are objected to with regard to claim 16, claim 4 is objected to, and the following rejections are presented: claim 16 stands rejected under 35 U.S.C. § 112(1); claims 9 and 11 stand rejected under 35 U.S.C. § 103(a) over Zheng (U.S. Patent No. 6,892,060); claims 1 and 15 stand rejected under 35 U.S.C. § 103(a) over Pickett (U.S. Patent No. 6,771,945) in view of Ichihara (U.S. Patent No. 7,206,360); claims 2-5 stand rejected under 35 U.S.C. § 103(a) over the '945 and '360 references in view of the '060 reference; and claims 9 and 11 stand rejected under 35 U.S.C. § 103(a) over the '360 reference in view of the '060 reference. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action. Applicant incorporates all previous Office Action Responses into the instant response.

Applicant respectfully traverses the §112(1) rejection of claim 16 because the Examiner has not met the initial burden per M.P.E.P. § 2163. Notwithstanding, in order to facilitate prosecution, claim 16 has been cancelled. Accordingly, the § 112(1) rejection of claim 16 is now moot, along with the drawing rejection based on claim 16. Applicant requests the objections/rejections relating to claim 16 be withdrawn.

Applicant appreciates the indication of allowability of claims 6-8 and 12-14. Claims 6, 8, 12 and 14 have been amended. The amendments are not intended to vary the scope of the claim, but rather to facilitate prosecution and approve readability, *e.g.*, antecedent basis. Applicant believes the claims are still allowable.

Applicant traverses the objection to claim 4, as improper. Under M.P.E.P. § 608.01(n)(III)

The test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends ( **35 U.S.C. 112**, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. dependent claim does not lack compliance with **35 U.S.C. 112**, fourth paragraph, simply because there is a question as to (1) the significance of the further limitation added by the dependent claim, or (2) whether the further limitation in fact changes the scope of the dependent claim from that of the claim from which it depends. The test for a proper dependent claim under the fourth paragraph of **35 U.S.C. 112** is whether the dependent claim includes every limitation of the claim from which it depends. The test is not one of whether the claims differ in scope.

With respect to claim 4, to the extent that the second amplifier-circuit is gain independent of the (first) amplitude detector, the addition of a further amplitude detector from which the gain depends is consistent with and further limits claim 1. Nothing in the claim language precludes the second amplifier circuit from being gain independent from the first amplitude detector while depending on the amplitude of a different amplitude detector. Accordingly, Applicant requests the objection to claim 4 be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 1-5 and 15 because the asserted combination of references would be inoperable. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 states that “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *Citing In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (U.S. 2007). (“[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious.”). The Office Action’s proposed modification to the ‘945 reference replaces the DC offset detection correction circuit with the amplitude detection circuit of the ‘360 reference. The intended purpose of the ‘945 reference and the asserted component 50 is DC offset correction. *See, e.g.*, Col. 1:5-7 (the field of invention includes the “method for reducing DC offsets”); and Col. 4:16-39. The amplitude detection circuit of the ‘360 reference rectifies the signal provided to the circuit. A rectified signal no longer conveys DC offset information because the negative signal values are rectified. Therefore, the proposed modification would no longer compensate for DC offset. Accordingly, the ‘945 reference would be inoperable for its intended purpose. *See, e.g.*, Col 1:5-7 (“method for reducing DC offsets”). Accordingly the § 103 (a) rejections of claims 1-5 and 15 are improper and should be withdrawn.

Applicant further traverses the § 103(a) rejection of claim 1-5 and 15 because the Office Action fails to provide a *prima facie* case of obviousness. The Office Action fails to provide proper motivation to combine the cited references as asserted, contrary to the requirements of M.P.E.P. § 2143.01, *e.g.*, there must be a reason to implement a “design choice”. Accordingly the rejection is improper and should be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 9 and 11 over the ‘060 reference because the ‘060 reference lacks correspondence to the claimed invention as a whole.

For example, the '060 reference does not teach an amplitude detector that detects the amplitude of the mixer-circuit output signal and that in response to the detection performs amplitude corrections. Instead, the asserted amplitude detector of the '060 reference performs amplitude detection on the signal after it has been filtered by the polyphase filter, and after having been recombined by the polyphase filter. *See, e.g.*, Figure 1 of the '060 reference. The output of the asserted mixer-circuit goes to the asserted polyphase filter without amplitude detection. Accordingly, the § 103(a) rejection of claims 9 and 11 over the '060 reference is improper and should be withdrawn.

Applicant traverses the § 103(a) rejection of claims 9 and 11 over the '360 reference in view of the '060 reference because the cited references lack correspondence to the claimed invention. For example, neither the '360 reference nor the '060 reference teach a resistor element for phase corrections as required in claim 9, or an adjustable feedback-gain element as required in claim 11. Accordingly, the §103(a) rejection of claims 9 and 11 is improper.

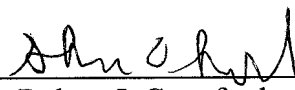
In view of the remarks above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, David Schaeffer, of NXP Corporation at (212) 876-6170.

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